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ABSTRACT

This review of the literature on achievement ambitions summarizes the more important developments in this area for the last 10 years. Sociology and psychology literature are included. Among the topics discussed are the following: (1) ambition and achievement in the context of role theory, (2) measurement of achievement ambitions, (3) acquisition and development of ambition, (4) sex roles and ambition, and (5) socioeconomic and related consequences of ambition. The conclusions of the paper indicate that: (1) there are few if any conventions by which ambition is assessed, (2) the social psychological sources of differential ambition are at best suggested by an unsystematic empirical literature, and (3) in tightly controlled experimental situations, success and failure at competitive tasks influence levels of ambition and are consequences of it. However, in the natural world, the successes and failures of persons are more likely to result from events in their life cycles such as marriages, divorces, etc. than from their differential ambition to achieve in these competitive settings. (Author/AM)

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INSTITUTE FOR RESEARCH ON POVERTY DISCUSSION PAPERS

ACHIEVEMENT AMBITIONS

Kenneth I. Spenner and David L. Featherman

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UNIVERSITY OF WISCONSIN - MADISON

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ACHIEVEMENT AMBITIONS

by

Kenneth I. Spenner*
The Boys Town Center for the Study of Youth Development**

David L. Featherman
University of Wisconsin - Madison

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** Before December 1, 1977: 11414 West Center Road, Suite 210, Omaha, Nebraska 68144 (402) 334-9500.
After December 1, 1977: Boys Town, Nebraska 68010 (402) 498-1490

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ABSTRACT

This review of the literature on achievement ambitions summarizes and organizes the more important developments of the last 10 years in Western industrial societies, primarily the United States. The sociology and psychology literatures are included, but the review is constrained by the lack of a single, dominant theoretical paradigm to order or explain the multitude of empirical generalization, or to provide an orderly program for the investigation of important issues. It does, however, attempt to highlight issues which appear to be resolved, reveal those that are not, and identify which research areas promise to be most fruitful.

The themes of worldly success and individual achievement have been central to the cultures of many western industrial societies. Following Weber, students of several disciplines have continued to pursue explanations which locate the sources of worldly success in the "motivations" and "ambitions" of individuals. The scientific literatures of both sociology and psychology reflect this hypothesis about the wellspring of achievement. However, these literatures are neither small nor homogeneous in the array of concepts, measures and explanations which are used to link "ambition" to "achievement." More important, there does not exist a single, dominant theoretical paradigm to order the multitude of empirical generalizations, to explain them, or to provide for an orderly program of investigation of important issues.

This review is constrained by this state-of-the-art. No attempt is made to provide a detailed map of the topography of this literature over the years. Rather, the review is directed at summarizing and organizing the more important recent developments[1] in the study of achievement ambitions. It attempts to highlight some of the issues which appear resolved, to reveal those that are not, and to identify the more promising research areas.

CONCEPTS AND APPROACHES

Role Theory as an Organizing Framework

This chapter casts both "ambition" and "achievement" against the background of role theory (see Biddle & Thomas 1966). Role is generally taken to refer to social locations or positions which embody expectations for behavior (Gross, Mason & McEachern 1958:17). From a developmental perspective, the life cycle can be seen as an articulated sequence of roles or role-sets, beginning with childhood in the family

of origin, followed by adolescence, and eventually by an adult role-set (see Elder 1968a and Dragastin & Elder 1975 for related uses of role and developmental perspectives). For present purposes, the significant role transitions include the acquisition of sex-role orientations in childhood and adolescence, the movement through school roles (e.g., student), the transition from school to adult work roles, and the transitions entailed in establishing a family, changing jobs, career progression, and movement in and out of the labor force.

With reference to the role framework, achievement will be defined in two fundamental senses. First, it will refer to role residing or incumbency which is subject to social evaluation and sanctioning. For example, Shils (1970) has described the ways in which occupational roles entitle their incumbents to degrees of interpersonal deference (prestige), and more generally, to levels of remuneration, job security and other rewards. Second, and aside from incumbency per se, achievement will refer to the level of role performance or accomplishment as assessed against standards for performance. Throughout, this chapter focuses upon achievement as worldly success; that is, in terms of the academic grades of students, of the accumulation of academic credentials, and of the monetary and status attainments of adults through their jobs. Admittedly a narrow materialistic view of achievement (it neglects a variety of shared and personal values such as self-fulfillment or education as understanding; the latter may or may not

be the goals of students or the rewards accruing to workers), this limitation does not seem excessive or unrealistic. Empirical research into the subjective dimensions of achievement finds materialistic success in and through the domains of family and occupational careers to be among the chief goals of adults in western industrialized nations (Katz 1964; Mayer 1973; Quinn & Shepard 1974).

In turn, ambition can be defined as a class of psychological orientations held with respect to the two types of achievement in and through roles. More specifically, "ambition" is an attitude or a complex of attitudes about self in relation to specific sets of objects in achievement situations. The notions of "orientations" and "objects" encompass (a) the cognitive categories that individuals use in perceiving role residing and performance (i.e., status, financial reward, "intelligent," competent, fulfilling), (b) the affective states that may be associated with role residing and performance (pride, shame, fear, anxiety), and (c) the behavioral intentions (going to school, entering the labor force, raising children) associated with attitudes. This essay foregoes a more detailed consideration of "attitude" other than to note that "ambition" (qua attitudinal construct) is likely to consist of cognitive, affective, and behavioral referents. This is not to gainsay the classical definitions of attitude (DeFleur & Westie 1963; Newcomb, Turner & Converse 1965) nor to deny the efficacy of alternate behavioral (Campbell 1963) and cognitive (Woelfel & Haller 1971; Kagan 1972; Mischel 1973) formulations.

Finally, one can think of "personality" as the learned repertoire of roles, "traits" as high level abstractions for repeated occurrences of role behavior, "personality development,""achievement training," and more generally "socialization" as role learning (see Brim 1960; Elder 1968a:249-255). Similarly, the different notions of "competence" (White 1959; Smith 1968; Moulton 1974) can be seen in relation to the second variety of achievement (i.e., as a learned capacity to perform, adapt, and master a role or multiple roles). As Klinger and McNelly summarize:

> ...role thus comes to suggest and delimit an individual's permissible aspirations, rewards, strategies and acts in each particular kind of social context, and also specifies a number of role inappropriate aspirations, rewards, strategies, and acts. (1969:575)

Ambition Nominally Defined

Most nominal concepts which fall under the rubric "ambition" derive in one way or another from expectancy-value formulations in psychology. This includes such concepts as level of aspiration, expectancy, motive, and motivation. For example, the general concept of "level of aspiration" received its early development from Lewin's field theory (Lewin, Dembo, Festinger & Sears 1944; Lewin 1951; Deutsch & Krauss 1965). Phrased simply the theory defined aspiration as goal-setting behavior in an environment (field) of personal values and subjective probabilities for success in attaining the goal in question. In this expectancy-value theory, level

of aspiration was indexed by the difficulty of the goal toward which the person was striving (Lewin 1951:81). Lewin and colleagues (1944:333-336) had an explicit equation for predicting the "resultant force" (of aspiration) on behavior, and went on to distinguish ideal goals from action (realistic) goals, verbal goals from true goals, and among the types of goal discrepancies (differences between performances and aspirations).

Following Lewin's use of the term, "level of aspiration" has become the modal ambition concept in the sociological literature. But current uses of the concept have oversimplified the detail embodied in the expectancy-value equation. For instance, the early, often cited studies by Reissman (1953) and Kahl (1953) defined aspiration as one's level of willingness to change to a higher prestige job, or one's desire and expectation for college attendance. The Lewinian notions of subjective probability, valence (value, incentive), and the continuum of difficulty underlying the goal-object have been subsumed by these researchers into a single assessment of the relation between self and the desired object.

Current uses of the term "aspiration" show several kinds of variations: (a) in objects (education, occupational prestige, material well-being, eminence); (b) in time (long- and short-range aspirations, age-specific aspirations); (c) the way in which subjective probability and valence are conceptualized (real and ideal aspirations, plans, importance of objects, certainty of attaining goal state); (d) and overlapping with these variations,

the modality of the relationship between self and focal object (like, desire for, want, hope to get, willing to work for, etc.). A sampling from the literature reflects the variations. Turner (1964a) used "ambition" to refer to the active pursuit of desired goals, distinguishing between a goal desired in itself and a goal desired as a means toward "higher stations in society" (material, educational, and occupational status). Kerckhoff (1974:4) defined "ambition" as "one's willingness to work to achieve goals." Van Zeyl (1974:31) dealt primarily with students' "mobility aspirations" which are defined as the desired levels of material, educational, and occupational achievement. Haller and Miller's (1971:9) concept of level of occupational aspiration is taken directly from Lewin's more general notion. Here the object is an occupational hierarchy, and the continuum of difficulty is found in the various levels of a prestige hierarchy. More generally, the uses of "aspiration" in the present body of "status attainment" research (e.g., Duncan, Featherman & Duncan 1972) rely primarily on the measured (attitudinal) relationship between self and incumbency in educational and occupational hierarchies (Sewell, Haller & Ohlendorf 1970; Hauser 1971; Gordon 1972; Alexander, Eckland & Griffin 1975).

The concepts of motive and motivation also bear a close relationship to Lewinian expectancy-value formulations, and they comprise a second source of ideas about ambition. The major recent use of these two constructs arises in the substantial program of research on achievement motivation (Atkinson & Feather 1966; for revision and extension see

Atkinson, Lens & O'Malley 1976; Atkinson and Birch 1970; Atkinson and Raynor 1974; Weiner 1974; Mednick, Tangri & Hoffman 1975:123-284; and Tresemer 1975). The concept of motive has consistently been taken to refer to relatively stable and general characteristics of personality, and more specifically, to a dispositional capacity for affective satisfaction, such as fear of failure, fear of success, or hope for success (Atkinson & Feather 1966:13). The link to behavior is provided by the concept of motivation. Distinct from motive, motivation refers to a resultant tendency to engage in or disengage from an activity. The sources of an individual's motivation or tendency to achieve lie in the pattern of motives he brings to the situation (or which are evoked by it), the bel[illegible]ne holds that his actions will be efficacious in his present situation or in the future, and the situational carry-over of recent "unsatisfied" (Weiner 1974:347) motivation (to achieve or resist achievement). The more recent elaborations have expanded the classic expectancy-value formulation to include a larger array of motives (Horner 1972), and cognitions (Moulton 1974, Weiner 1974) and an elaboration of the motivation equation to include the immediate past and the anticipated future as determinants of overall tendencies to approach or avoid action (Atkinson & Raynor 1974). In terms of the definition of achievement ambitions employed in the present review, this research tradition would point to motives as trait-like orientations--the capacity for affective satisfaction across competitive situations--and to motivation as a confluence of orientations (belief, motive, expectancy) combining to define

tendencies to behave in a given fashion (role residing and performance).

Outside the McClelland-Atkinson research programs, the definitions of motive and motivation have been less consistent. If they tap the phenomenology of "that" which moves or induces a person to act in a given way, then the nature of "that" and the level at which it operates have been subjects of continued controversy. The situational view of sociologists employs motives as justifications for actors' programs of conduct (Gerth & Mills 1953:112-129) and as methods for organizing actors' everyday environments (Blum & McHugh 1971). Foote's (1951) early attempt to avoid the predispositionist connotations (of motive) by locating motivation in the definition of the situation provides another example. Foote saw motivation as referring to the extent to which an actor defines a problematic situation as "calling for performance of a particular act, with more or less anticipated consummations and consequences, and thereby his organism releases the energy appropriate to performing it" (Foote 1951:15). In psychology the repeated attempts of Mischel (1968, 1973) to recast "personality" within the framework of a cognitive social learning theory (thus purging the term of its static, trait properties) is consistent with the situational perspective. Finally, in one of the more bold reconceptualizations, Kagan (1972:54) has recommended theoretically treating motive (latent) and motivation (active) as cognitive representations of a future desired goal state with no necessary relationship to either action or affect.

In sum, the concepts of aspiration, expectancy, motive and motivation are the central ideas around which the literatures reviewed

in this essay were selected and organized. Their commonality inheres in the evolving understanding of "ambition" as a set of attitudes held by an actor in relation to certain classes of objects in specific situations, especially those which are evaluated and understood (perhaps by incomplete social consensus) as competitive (e.g., schools and jobs). Adoption of a role theoretic framework for this review essay has three heuristic values. First, it is consistent with the social psychological, social-situational view which is taken of "ambition." Second, it provides a point of contact for the research literatures in sociology and psychology which have considered the causes and consequences of ambition. In terms of the distinction of achievement as role incumbency (or role residing) and achievement as qualitative differences in role performance, it is roughly true that sociologists have given greater emphasis to the former (e.g., completion of increasingly higher levels of schooling or the attainment of higher paying, more prestigious jobs) and psychologists to the latter (e.g., test performance in a given grade or classroom, productivity among workers at the same job). Third, the framework allows for the organization of the essay by the succession of competitive roles in the life cycle. Given that the social context of the corpus of research being reviewed here is a capitalistic, industrial economy, the major competitive roles to be considered are scholastic and occupational ones. Thus, Duncan's (1968) "socioeconomic life cycle," relating socioeconomic achievement of persons through their jobs and schooling and both in turn to the

socioeconomic backgrounds of these persons (viz., the occupational and educational achievements of their parents), and the "status attainment" approach to social mobility (e.g., Duncan et al. 1972) illustrate this conceptual organization.

Measurement of Achievement Ambitions

The major approaches to the measurement of "ambition" include (a) projective measures, (b) values and related inventories, and (c) direct questionnaire measures. A survey of the performance and quality of the different measures reveals a mixed state-of-affairs as assessed by the classic psychometric desiderata for validity and reliability. Moreover, the attention given to measurement issues by various proponents of measures has ranged from thorough to non-existent; occasionally, the actual use of a particular measure or procedure by analysts has proceeded without regard to available studies challenging such use.

PROJECTIVE MEASURES. The achievement motivation tradition has drawn on projective measures to assess the motive to achieve. (See Atkinson & Raynor 1974 or Atkinson, et al. 1976 for current statements of the theory; see Weiner 1972:169-269 for a very readable measurement and substantive history of the tradition to that date. More recently, projective measures have been used in the related tradition of research initiated by Horner (1972 and Tresemer 1975) to assess the fear-of-success motive.) The most common measure has been selected pictorial vignettes (cards) of the Thematic Apperception Test (TAT). How has the TAT fared in nearly 30 years of use as a procedure for assessing achievement orientation?

While the answer is a review in itself, several summary observations are warranted. First, the evidence for the construct- and criterion-validity (for males) resides in the argument that the TAT, in a large number of studies over the years, has consistently validated the experimental predictions derived from the theory of achievement motivation (see Weiner 1972 for a recent review). The volume of evidence is impressive, even though the size of effects and strength of relationships are neither large nor always unequivocal. Klinger (1966), in a detailed review of a large number of studies, found the motive to achieve associated with various performance measures in about one-half of the cases; even among these, however, the patterns of hypothesis confirmation were ambiguous in supporting the theory's predictions. Weinstein (1969), Meyer, Folkes and Weiner (1976), and Touhey and Villemez (1975) questioned many risk-preference findings, based on the TAT as the diagnostic instrument, which have been used as the key elements for construct validity. Second, the content validity of the TAT (in the sense of being free from the cue effects of particular stimuli in a measurement situation) has really never been definitively established (see Weiner 1972:185-187; Holmes 1974; Korman 1974:143-145). Third, with the exception of the intercoder reliability in scoring achievement imagery, the TAT is demonstrably inadequate in other aspects of reliability (test-retest over short and long periods, internal consistency (homogeneity), equivalent forms, and split-half) when assessed against conventional psychometric standards (see Skolnick 1966, Klinger 1968, Weinstein 1969, Entwisle 1972, Veroff, Atkinson, Feld & Gurin 1974). Atkinson (Atkinson & Raynor

1974:8-9; Atkinson et al. 1976) has argued that the conventional canons of psychometrics may not apply to the measurement of achievement motivation. In measuring the stream of "spontaneously emitted (operant) imaginative behavior," the motive's strength varies sharply under "neutral" vs. "aroused" measurement conditions, and the resultant level of motivation for performance on an achievement task is a tangled web of nonlinear functions, rendering linear correlational procedures ineffective.

Perhaps the most fundamental problem for the purpose of this review is the disagreement over exactly what is measured by the TAT. Klinger (1966) has argued that fantasy-based achievement scores reflect not only a dispositional motive but other cognitive and perceptual responses as well. Klinger (Klinger & McNelly 1969:574) concludes that what is measured by the TAT is better conceptualized as an "imaginal reflection of the subject's current social position within the surrounding matrix of social roles."

Related to this issue is the fourth observation: namely, both the validity of the TAT and the applicability of the constructs of achievement motivation have been questioned for females (see Hoffman 1972, 1974 and Stein & Bailey 1973 for reviews; also, see Horner 1974).

Another and more recent projective procedure has involved the measurement of the motive to avoid success (fear of success or FOS) (Horner 1968, 1972, 1974). At the end of the standard administration of the TAT, subjects are asked to respond to short leads to verbal vignettes which depict accomplishment by a male or female in a mixed-sex competitive achievement situation (i.e., "After first term

finals, Anne (John) finds her(his)self at the top of her(his) medical school class"). The dispositional level of fear of success is taken to be manifest in the negative achievement imagery in the protocols and can be detected and scored conventionally (Horner 1974:107). The FOS measure shares many of the same strengths and weaknesses found in the TAT. Based on the extensive review by Zuckerman and Wheeler (1975) and the full annotated bibliography by Tresemer (1975), the following conclusions about the scientific status of the fantasy-based measure of fear of success seem fair:

> ...(a) Horner's results do not support the hypothesis that high fear-of-success females perform poorly under competitive conditions; (b) there are no reliable age or sex differences in motivation to avoid success; (c) fear of success and sex-role orientation appear to be unrelated; (d) it is not clear whether the fear-of-success measure taps a motive or taps cultural stereotypes (see Juran 1976 and Monahan, Kuhn & Shaver 1974 for recent experimental evidence demonstrating the latter); (e) there are no consistent relationships between fear of success and achievement-related variables; (f) the reliability of the fear-of-success measure is low (probably in the .30 - .40 range); (g) there are no consistent relationships between fear-of-success and any behavioral measures (Zuckerman & Wheeler 1975:932).

(A number of related or revised objective and fantasy-based measures of FOS have been proposed in recent years but the judgements on their quality are not yet in hand [Pappo 1972; Good & Good 1973; Horner, Tresemer, Berens & Watson 1973; Spence 1974; Tresemer 1975]).

VALUE AND RELATED INVENTORIES. Scales of questionnaire items have been used to assess one or multiple components of "ambition" or a global "achievement orientation" (see Kahl 1965 and Van Zeyl 1974:136 for the lengthy but inclusive lists of such orientations). These include scales so diverse in their manifest content as "occupational primacy," "trust," "mastery," "deferred gratification," "individualism," "familism," "opportunism," "work-orientation," "future-orientation," Strodbeck's (1958) V-Scale, and Rosen's (1956) scale of achievement values, along with more recent questionnaire inventories proposed as objective measures of resultant achievement motivation (Mehrabian 1968, 1969; Veroff, McClelland & Marquis 1971; Veroff, McClelland & Ruhland 1975). In the face of such diversity it is exceedingly difficult to summarize and generalize about these measures of "ambition." Yet several observations are important in evaluating the utility of these instruments for research.

First, the scales differ in their assumptions about the uni- vs. multi-dimensionality of "ambition." Kahl (1965) suggests at least four components of so-called "achievement orientation" (viz., activism-mastery, trust, independence from family, and occupational primacy-accomplishment). Weinstein (1969) finds seven or eight

dimensions. Veroff et al. (1975) identify six to eight dimensions, each of which has varying relevance for racial and gender subpopulations. Despite these diverse approaches, some investigators employ composite indexes of global constructs (e.g., Van Zeyl 1974). Others generate measures for resultant motivational tendencies which draw on items from vastly different object domains (Mehrabian 1968, 1969) or otherwise combine items, treating the resultant distribution of scores as meaningful. (See Cronbach & Furby 1970, Thomas 1971, and Wells & Marwell 1976:89-104 for discussions of often unanticipated methodological and conceptual consequences of such procedures.)

Second, strict comparability of measures for the same concept across studies is more the exception than the rule. Where items are similar, comparability is often lessened through the different combinations and transformations performed on items. While the specific measurement procedures may detract little from any individual effort, the mosaic of uses has not enhanced the prospect for the systematic and cumulative building of theory.

Third, conventional assumptions about the latent content of the scales differ to the degree that some are taken as indicators for underlying dispositions or motives, while others are interpreted as reflections of self-attitudes and beliefs about a set of objects at a given point in time. Questionnaire measures for resultant need achievement (Mehrabian 1968, 1969; Veroff et al. 1971) are an example of the former, while many measures of work orientations and of beliefs about achievement objects are examples of the latter.

The major implications of the difference are for construct validity and for the quality of inferences about antecedents and consequences emanating from the construct (Duncan 1969). So, even assuming both a reliable measure of an orientation and its unambiguous assignment in a causal sequence, its validity as an indicator of an underlying disposition cannot be assumed. For every single-point-in-time measure there exists an hypothesis that the measure is conflated with previous or contemporaneous achievement experiences of either role residing or role accomplishments. Thus, statements about the effect of ambition on achievement (or about achievement values on role aspiration, and so on) risk a confounding of the effect of the underlying disposition with the psychological re-orientation, satisfaction, or dissatisfaction that accompanies achievement experiences. Short of rather elaborate, multiple-measure, longitudinal or experimental designs, structural-equation models (see Bielby & Hauser 1977) offer one (albeit not fully satisfactory) option to address this form of nonrandom measurement error. The contamination of measurement in this fashion is a problem for all assessments of an underlying trait. The resolutions are neither simple, nor easily obtained, nor always conclusive (we treat some of the substantive outcomes in latter sections; see Duncan 1969; Duncan et al. 1972:130-155; Duncan & Featherman 1973).

DIRECT QUESTIONNAIRE MEASURES. The most common measurement strategy, particularly in the sociological literature, directly asks the respondent his or her choice of achievement objects or objectives.

The usual objects are future occupation or educational attainment and less frequently, income or material possessions, career-homemaker, eminence, or more detailed aspects of one's future status levels. Haller and Portes (1973) have suggested organizing the objects around the status content dimensions of stratification systems (occupation, education, power, and wealth). The variations in measurement center around (a) single- vs. multi-item measures, (b) the period of goal (object) attainment ranging from the immediate future to a more distant age or time, and (c) the modality of self-object relationship and the value and certainty attached to the relationship (reflected in wordings such as "hoped for," "desired," "plans," "expect to enter," "would like to obtain," "prefer," "anticipate," and so on). Much like the attitude-behavior literature (Schuman & Johnson 1976) this type of measure (as well as the underlying construct) varies greatly in level of specificity, ranging from quite specific behavioral intentions, on the one hand, to the more general orientation on the other. As in the attitude-behavior literature, the realistic or intention-like "ambition" measures are more closely correlated with achievement-related aspects of one's social background and proffer better predictions of one's eventual behavior (see Duncan et al. 1972:107-111; Haller & Miller 1971).

As a whole, validity, reliability, and stability of this class of measures are not as problematic. For example, Haller and Miller (1971) present a full set of validational evidence for the multi-item Occupational Aspiration Scale (OAS). It shows reasonable criterion,

construct, and concurrent forms of validity for a social psychological construct (i.e., for adolescent males, in multiple sample, internal reliabilities of about r=.8 and test-retest reliabilities [10 weeks] of r=.77). More recent evidence shows slightly lower levels of reliability for U.S. females (Haller, Otto, Meier & Ohlendorf 1974, Otto, Haller, Meier & Ohlendorf 1974).

Several issues have arisen in the application of these direct measures of achievement goals. Some research distinguishes between the stated choice of a goal when no constraints are placed upon it ("aspiration") and the statement of a goal when such constraints are brought into consideration by or for the respondent ("expectation"). "Aspirations" are assumed to be more idealistic statements of desired objects of achievement while "expectations" are interpreted as more realistic ones (Empey 1956; Rehberg 1967; Haller et al. 1974). Individual differences between idealistic and realistic goals have been subjected to sociological analysis. Not all social aggregates share common cultural goals ("aspirations"); nor do they enjoy equal access to them ("expectations"). The concepts of "class values," "success values," "range of aspirations," and "value-stretch" all call attention to the patterned discrepancies between "aspirations" and "expectations" (see Merton 1968; Han 1969; Della Fave 1974; Rodman, Voydanoff & Lovejoy 1974). Examples of race and gender differences in the slippage between realistic and idealistic goal choices appear in Berman and Haug (1975) and Marini and Greenberger (1976a, 1976b). In evaluating the utility of this distinction, two methodological

matters should be considered. Most research which has employed the difference between idealism and realism (aspiration minus expectation) as a measure of "ambition" has failed to recognize the analytical problems entailed by the distribution of difference scores (consult Blau & Duncan 1967:194-199; Cronbach & Furby 1970; or Wells & [illegible]well 1976:89-104 where consideration is given for a related concept). Second, the more methodologically sound recent evidence suggests that different manifestations of "aspiration" are part of a common domain (Haller et al. 1974; Marini & Greenberg 1976a). Even here, the high correlation among indicators of "aspiration" and "expectation" introduces interpretational problems (via multicollinearity) into analyses which attempt to distinguish the causes and consequences of realistic from those of idealistic achievement goals.

Another issue in the use of the direct measures is the validity of metrics for females (see Marini & Greenberg 1976a; McClendon 1976; Featherman & Hauser 1976; Haug 1973, 1977). A convincing verdict on this matter is yet to be rendered.

In addition, the timing in the life cycle (age) of measurement by the more direct questions and the stability of ambition (qua goal choice) over years of time are problematical (as they are for projective and inventory measures as well). Most studies of "ambition" involve persons in pre-adolescence and adolescence. Therefore, matters of formation (the earliest age at which achievement goals such as educational level and occupation are crystallized), stability, and

rate of development (potentially important "critical stages") are raised. For instance, elementary school children and even adolescents possess a rather crude conception of the world of work (Gunn 1964 ; Simmons & Rosenberg 1971; DeFleur & Menke 1975). The accuracy of perceiving and reporting something so immediate as parental occupations is quite low until adolescents reach their last years of high school (Mason, Hauser, Kerckhoff, Sandomirsky-Poss & Manton 1976). Asipratıons of junior-high-school students are not systematically related to other plans, their social backgrounds, or their eventual attainments (see Kerckhoff 1974 for evidence on this point for 6th, 9th, and 12th grade cohorts). Finally, the longitudinal evidence suggests nontrivial shifts in aspirations and plans for education, occupation, income, and labor force participation for substantial (1/4 to 1/2) portions of the population of male and female adolescents (see McDill & Coleman 1963; Gribbons & Lohnes 1965, 1966; Williams 1972; Kayser 1973, 1975; Roderick & Kohen 1976). A study which estimates stability and reliability of direct, object-specific measures (or one which approaches having time-series observations over, say, the junior-high and high-school period) has yet to be reported (see McDill & Coleman 1963 and Kayser 1973 for suggestive data).

ACQUISITION AND DEVELOPMENT OF AMBITION

The development of "achievement ambitions" in childhood and adolescence draws on three interrelated sources: (a) a surrounding constellation of social psychological factors associated with the self

as an agent of one's own development; (b) socialization in the family of origin; and (c) social influences for achievement stemming from institutional contexts outside the home (e.g., the school, peer associations).

The Self in Relation to Achievement: Correlates of "Ambition"

In the language of role theory, the self is a complex of roles enacted by a person, either by virtue of actual incumbency or in anticipation of (hopes for) incumbency. In considering the expression of differential "ambition" in competitive situations such as schools and occupations, one confronts more than one element of the self. Enactment of one role--that of student, for example--often is influenced by other facets of the self (e.g., being female) and by the personal organization of one's multiple roles into a hierarchy of salience. Therefore, in reviewing the literatures which comment upon the origin of "ambition," it is important to summarize at least some of the more psychological correlates of "ambition" which have been regarded as part of the larger self, particularly in its relation to achievement or competitive roles.

Socialization for achievement is subject to a variety of socio-biological, socio-historical, and cultural influences (Kohlberg 1969; Bronfenbrenner 1970; Hoppe, Milton & Simmel 1970; Elder 1974; Braungart 1975; Clausen 1975). "Achievement ambitions" constitute but one element of a matrix of beliefs, skills, knowledge, and attributional tendencies which this variegated array of influences

produces within the self. Recent research has identified a series of such elements of the self which is associated with achievement orientations. The more central correlates include

(a) locus of control (Katz 1967; Kerckhoff 1974; Otto & Featherman 1975; Lefcourt 1976; Phares 1976; Weiner, Russell & Lerman 1978)

(b) self-esteem and generic self conceptions (Gordon 1972; Rosenberg & Simmons 1972; Van Zeyl 1974; Wells & Marwell 1976)

(c) future orientation (Raynor 1974; Rand & Ellis 1974; Lamm, Schmidt & Trommsdorff 1976)

(d) delay of gratification (Miller, Reissman & Seagull 1965; Mischel 1974)

(e) competence (White 1959; Smith 1968; Moulton 1974; Veroff et al. 1975)

(f) intelligence (Sewell & Shah 1967; Duncan et al. 1972: 69-105; Atkinson et al. 1976; Bowles and Gintis 1976)

(g) risk-preference (Weinstein 1969; Atkinson 1974; Meyer et al. 1976)

(h) intrinsic-extrinsic "motivation" (Deci 1975; Ross 1976) and values (Lueptow 1968; Kohn 1969; Kalleberg 1977).

Several features of this constellation of "ambition's" correlates are worth noting. Like "achievement ambitions," the constellation includes phenomena variously conceptualized as affective, behavioral,

and cognitive. Second, the components are taken as trait-like dispositions by some and as situationally specific or malleable by others. Third, elements of the constellation are at times taken as causal sources of ambitions (i.e., intelligence)--hence to speak of their development is to speak indirectly of the development of achievement ambition. Alternately, elements of it are regarded as correlates, consequences, or even second-order manifestations of "achievement ambitions." More often, given the organization of social and psychological research, there are mini-theories and bodies of literature for particular concepts (i.e., "self-esteem"--Rosenberg 1965; Coopersmith 1967; Rosenberg & Simmons 1972; Wells & Marwell 1976) or a particular element is drawn into a model or study in which achievement roles are at issue (i.e., "fatalism"--Kerckhoff 1974; "self-conceptions"--Gordon 1972; "creativity" and "conformity"--Porter 1974, 1976).

While a single theory has not been advanced to organize the constellation and to explain its relation to "achievement ambitions" and their expression, two perspectives, achievement motivation theory and attribution theory, appear to hold some promise.

Achievement motivation theory (see Atkinson & Birch 1970) offers an explicit formal framework for conceptualizing achievement behavior, particularly in narrowly defined micro-social or experimental situations, as a product of psychological (e.g., motives, competence, future orientation) and situational (subjective probabilities for success and failure at a particular task, one's cognitions about self in particular situations) determinants (Atkinson et al. 1976).

For example, the intellective performance implied by a score on a test of mental ability can be interpreted within the formal properties of the theory to reflect a nonlinear function of "true" ability (the level of performance an individual is capable of achieving at a task when optimally motivated) and the resultant strength of motivation to achieve in the test-taking situation. The implication of this line of argument is to lend a motivational as well as an aptitudinal interpretation to mental test scores (Atkinson and colleagues are critical of the mental test movement on this point [1974:389-410, 1976].) Further, this expectancy-value type of theory draws on different psychological and situational components of the correlates of "ambition" to specify formal relationships among them as determinants of achievement. In addition, achievement motivation research has matured into a sociologically more sophisticated and complex theory in recent years, expanding to include a larger scope of "self" cognitions and attributions and moving from isolated experimental episodes to the cumulative achievements engendered in sustained academic performance and "career-striving" (e.g., Atkinson & Raynor 1974:367-410).

This is not to proclaim the tradition a panacea. Its procedures, measures, and specifications have not proven very workable for large-scale survey research. The effect of motivation on experimental, molecular task performances is still the most effective domain of the theory. Its ability to explain the acquisition of and performance

in competitive roles such as occupations is more limited (e.g., Duncan et al. 1972:116-155). Measurement, conceptual, and interpretational problems seriously challenge the theory (Klinger & McNelly 1969; Entwisle 1972; Weiner et al. 1978). Moreover, the tradition has a male-side and a female-side--being criticized as a male model of achievement motivation (see Stein & Bailey 1973 for a review) and resulting in sub-literatures and gender-specific motivation models. On the other hand, sociologists stand to gain by being reminded of the multiple determinants of motivation for task performances; they can ill afford to ignore the steady output of recent work on how molecular task motivation and behavior are cumulative, thus providing an account of the motivational basis for larger molar achievements (e.g., occupational careers).

One other recent area of research which holds promise for organizing the larger web of "ambition" and its surrounding constellation is attribution theory (Jones, Kanouse, Kelley, Nisbett, Valins & Weiner 1971; Harvey, Ickes & Kidd 1976, 1978). Attributions refer to the inferences which individuals make about self, others, and the environment. As a systematic way of studying ongoing definitions of the situation, the attribution perspective assumes (a) an individual attempts to assign causes to the important instances of his or others' behaviors and seeks information which permits doing so, and (b) that the assignment of causes is systematic and bears consequences for subsequent feelings, cognitions, and behaviors (Jones et al. 1971). If individuals define role incumbency and performance in terms of success and failure, then causal attributions about self, others, and environment in relation to these experienced

or anticipated outcomes should be instrumental in the formation and change of achievement ambitions. Weiner (1974) and colleagues have offered a model of achievement motivation, showing how attributions about causality (i.e., ability, effort, task difficulty, luch, etc.) are intricately related to certain achievement orientations (expectancy shifts, affective reactions) and striving behaviors (persistence, response rate, choice, intensity of activity). Already the attribution perspective has been used in the interpretation of intrinsic-extrinsic motivation effects (Ross 1976), locus of control (Weiner 1974), risk preference (Meyer et al. 1976), self-esteem, personal control, perceived freedom (see Steiner 1970 and Harvey et al. 1976 for reviews), expectancy shifts and expectations for success and failure (Weiner 1974; Frieze 1975), and for sex-role phenomena (see Deaux 1976 for a review). Viewed in this way, "achievement ambitions" and their psychological correlates are linked through the ongoing series of attributions about self in relation to the environment of achievement objects, roles, and role performances.

Familial Determinants of Achievement Ambitions

One of the most fertile sociological approaches to the study of ambition and its causes has been through characteristics of the family of origin and the variations in socialization styles, resource provision, and the social influence which parents apply to their offspring. There is no lack of evidence, particularly at the bivariate level, that social class is associated with socialization practices thought to promote differential achievement and with levels of "ambition."

At the multivariate level, Sewell and Shah (1967) found that socioeconomic origins, controlling for ability, explain about 10 percent of the variation in college plans for a group of Wisconsin high school males. The tendency of ability and socioeconomic origins to be positively correlated accounted for an additional 9 percent of variation in college plans. Both of these relationships were slightly stronger for females. A number of studies of students enrolled in schools in the late 1950s and early 1960s report similar findings (Alexander & Eckland 1974; Hauser 1971), although the sex difference may have narrowed for students in the 1970s (Hout and Morgan 1975; Marini & Greenberger 1976b; Debord, Griffin & Clark 1977). For whites occupational and educational ambitions are about equally responsive to the differences in the socioeconomic origins among youth. To the extent that sex differences are apparent, they suggest that a girl's social background is more closely linked to her educational aspirations than to her occupational ambitions (Marini & Greenberger 1976a; Debord, Griffin & Clark 1977). In any case, the reflection of social class in levels of educational and occupational ambition is weak to modest ($r \approx .25$ to .35).

Blacks seem to hold average levels of ambition which are as high or even higher than those of whites (for example, see Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld & York 1966; Rosenberg & Simmons 1972; Hout and Morgan 1975); but there are other substantial race differences. While white educational and occupational ambitions generally rise across successive grades in school (particularly more for boys) (Hauser 1971:108; Kerckhoff 1974:20; Rosenberg & Simmons 1972:108-109), there is some evidence

to suggest that occupational ambitions of black students increase less rapidly and that their educational ambitions may actually decline as they matriculate (Rosenberg & Simmons 1972). Moreover, there is fairly consistent evidence showing the educational and occupational ambitions of blacks to be much less dependent on their socioeconomic origins; both social background and ability (but not necessarily the interpersonal and psychological determinants) account for less variation in black achievement orientations than among white students (Hout & Morgan 1975; Portes & Wilson 1976; Kerckhoff & Campbell 1977; Debord, Griffin & Clark 1977). Some have interpreted the pattern among blacks as suggesting "unrealistically" high ambitions (vis-a-vis social background and the occupational handicaps of black color per se) similar to those of persons with extensive "fear of failure." Others have suggested that the stronger connection between the interpersonal, normative influences of the school situation and the ambitions of blacks (both in relation to the effects of social background and to the overall pattern of influence among white students) implies that ambition in the racial minority is conditioned by the degree of conformity with white standards for success and definitions of achievement.

Multivariate studies--which actually specify the determination from social origins to socialization practices, and from parental influence to ambitions using an adequate sample and sound measures for the different variable sets--are rare. Among the few, the lines of investigation center around (a) socioeconomic variations in socialization styles as determinants of ambition, (b) familial contingencies and

variations in ambition (birth order, sib size, age at marriage, farm origins, etc.), (c) the matrix of familial and nonfamilial significant others exerting interpersonal influence on ambitions, and (d) sex-role socialization and variations in achievement orientations.

From the first line of inquiry, Kohn's (1969) research provides the most detailed mapping of how particular socialization styles follow from parental values, which in turn are modestly dependent on particular aspects of father's occupational activity. Fathers engaged in self-directed work (circumscribed by freedom from close supervision, freedom from routinization, and substantively complex work) are more likely to value internal standards for behavior and less likely to value conformity to external authority. Each of these orientations is reflected in specific training practices with children, in the quality of the parent-child relationship, in the patterns of role allocation among parents, and in the content of role training within the family. While the direct link of Kohn's hypotheses to adolescent ambition awaits a follow-up of the children in their adulthood, Mortimer (1973), drawing on a more restricted but related set of occupation and socialization variables, finds some of the predicted variations in the career choices of a group of University of Michigan males.

Other strands of research relating socialization styles to achievement ambition have centered around (a) role learning per se (achievement and independence training—Rosen 1959; Scanzoni 1967; Solomon, Hoolihan, Busse & Parelius 1971), (b) the affective quality

of parent-child relationships (see Walters & Stinnett 1971 for a review; Rosenberg 1965; Furstenberg 1971; Mortimer 1973; Clausen 1974; Ihinger 1977), and (c) the power structure of parent-child relationships ("autocratic," "democratic," "paternal-maternal dominance"--Bowerman & Elder 1964; Rehberg, Sinclair & Schafer 1970; Felice 1973; Lueptow 1975). The assessments of relationships in these bodies of literature range from "inconclusive" (Scanzoni 1966, 1967) to "complex and sometimes conflicting evidence" (Goode 1964) to containing several "consistent and comparatively conclusive relationships" (Rehberg et al. 1970). To that can be added the fact that there are many apparent sex differences (see Hoffman 1972 and Stein & Bailey 1973 for reviews). If there is a fairly well documented relationship, it is that higher socioeconomic origins facilitate an affective level in the parent-child relationship which is conducive to the types of role learning that engender high achievement orientations.

But a review of this large literature also yields two important qualifications to the generalization. It rests upon relatively weak correlations (for example, see Furstenberg 1971 and Scanzoni 1967); it is not drawn from an explicit multivariate causal framework (as contrasted to a series of unconnected correlations). With the introduction of structural equation models into the sociological literature, a more powerful device for sorting out complex relationships has become available. If socialization styles (e.g., achievement training practices, parent-child relations) are important intervening variables, mediating the impact of social background on achievement orientations, then the incorporation of the multiple hypotheses

from this literature into an explicit multivariate causal framework would serve to better document the various claims of simultaneous influences that have been made. Anderson and Evans (1976) illustrates this design. Their model specifies a causal sequence from father's education and respondent's gender to achievement and independence training, to (sequentially) the respondent's sense of "activism-mastery," "self-concept" and "academic achievement" scores. The latter two variables are specified in a nonrecursive (symmetrical, two-way causal) relationship. While their sample size and several estimation idiosyncracies (Fink & Stoyanoff 1977)[2] cast doubt upon the substantive findings, they do not detract from the laudable strategy of specifying family socialization-"ambition" hypotheses in an explicit multivariate framework.

Familial Contingencies

Other family-related factors in "ambition" which have received consideration include birth order, number of siblings, farm origins, ethnicity, religion, marriage plans, and broken homes. There is some evidence that first-born children hold higher achievement ambitions (Elder 1962; Rosen 1964; see Sampson 1965 for a review). But the relationship has not been consistently replicated (Miller & Maruyama 1976); the designation of birth order is ambiguous (Adams 1972; Schooler 1972), and socialization explanations have not been systematically used to reconcile empirical differences (see Elder 1968a for a critique). On the other hand, farm origins

and the number of siblings have been shown to directly or indirectly depress achievement ambitions (Sewell & Orenstein 1965; Sewell et al. 1970; Nelson & Simpkins 1973). More recent multivariate specifications have suggested that the negative effect of a large sibship on aspirations arises because the parents of many children are less encouraging of "ambitious" educational and occupational goals (Hauser 1971; Kerckhoff 1974). The latter explanation applies to white, but not to black families (Hout & Morgan 1975). The bulk of the evidence on religious variations in aspirations shows no consistent sizeable pattern (Elder 1962; Greeley 1963; Featherman 1971; Duncan & Featherman 1973; compare Rhodes and Nam 1970 and Schuman 1971). Bayer (1969) has shown that plans for early marriage depress educational aspirations modestly, especially for females. But actual age at marriage appears to mediate little of the effect aspirations have on eventual attainments (see Call & Otto 1977). Finally, ethnicity (when examined in a multivariate framework which includes controls for socioeconomic origins) does not seem to produce very large net variations in achievement orientations among European ethnics (Featherman 1971; Duncan & Featherman 1973). On the other hand, the effects of specific heritage on achievement orientations among "new" immigrant groups from Latin-America (Mexican, Puerto Rican) and Asia (see Felice 1973; TenHouten, Lee, Kendall & Gordon 1971; Heller 1971; and several of the studies reported in Picou and Campbell 1975) have yet to be thoroughly assessed. Detailed studies with the necessary matrix of measures for regional or national probability samples and with sufficiently large subsamples are not yet available.

The Matrix of Significant Others

Another fruitful sociological approach to the explanation of differential "ambition" has been to assess the goal-specific influence that parents, teachers, and peers (as "significant others") exert on one's aspirations. The distinctive features of this approach include the use of more specific concepts of achievement orientation (educational and occupational aspirations, plans, etc.) in assessing the segmented interpersonal influence that "significant others" have on one's achievement attitudes. This approach has proven tractable in survey research, and perhaps for this reason interpersonal influence of "significant others" has been shown to be one of the more potent determinants of ambition.

From a role perspective, the theoretical rationale for focusing on "significant others" springs from (a) reference group theory, particularly the comparative and normative influence functions of selected individuals and groups (Kelley 1952; Kemper 1968), and (b) from Mead's (1934) and others' (e.g., Sullivan 1940) notions of how the self emerges from the communicated information from others. Literally then, the sources of one's attitudes about self in relation to competitive roles depend closely on the role-phenomena he or she is exposed to and the definition of the situation that others provide. Haller and Woelfel (1969, 1972; Woelfel & Haller 1971) have summarized this literature and restated the two modes of interpersonal influence which "significant others" proffer. First, they influence ego's aspirations by serving as points of comparison--as examples--modelling

roles and role performances. Second, through the explicit encouragement and discouragement of ego's behavior they provide, through the expectations for ego which others hold and communicate, they define normatively appropriate roles, role objects, and performances.

The research literature reflects a number of variations: (a) in objects (education and occupation being the most prominent); (b) in modes of influence ("peers college plans" as an example of modelling influence vs. parents' and teachers' encouragement as direct normative influence); (c) in the specificity of others to ego (role-categorical, such as parents, teachers, peers, relatives; or, person-specific, where influence is actually measured for each of one's specific others); (d) in the use of perceived vs. actual measures of influence (i.e., using ego's report of the influence others exert or measuring others' exemplifications (modelling) and expectations (defining) from the influence source.[3] By cross-classifying these variations, one obtains a sense not only of the variety of ways of studying significant others' influence but also of the conceptual and measurement variations underlying empirical differences in the literature (see Spenner 1974 for a more detailed review). Bearing these distinctions in mind, we find the evidence fairly consistent on several points.

Several studies of person-specific "significant others" (persons by name) for educational and occupational aspirations show most high school adolescents draw on five to ten others for information, with a more restricted set of two or three individuals who are very

influential (Haller & Woelfel 1972; Curry et al. 1976). More important, parents, other relatives and peer friends, and teachers and guidance counselors (in that order) emerge as the most frequently mentioned categories of others consulted by adolescents in setting their "ambitions." This supports the use of role-categorical measures found in most studies (see, for example, Sewell & Hauser 1975 and Alexander, Eckland & Griffin 1975). Parents and peers emerge as the strongest sources of influence on status aspirations for education and occupation (Kandel & Lesser 1969, 1972; Haller & Woelfel 1972; Williams 1972; Alexander, Eckland & Griffin 1975; Sewell & Hauser 1975; Curry et al. 1976). While subject to further replication, available evidence suggests that parents are relatively more important as "definers" (providing encouragement, stressing college, providing information about occupations) while peers serve both as "models" and "definers." Teachers, guidance counselors, and other adult friends and acquaintances provide educational and occupational models (see Haller & Woelfel 1969, 1972 and Curry et al. 1976, 1977 for race and sex variations; and Picou & Carter 1976 for community of origin variations).

Substantively, the "status attainment" approach to social mobility research provides a picture of the relative importance of these and other selected determinants of educational and occupational

aspirations. The encouragement of one's parents and the plans of one's peers appear to shape "ambitions" more directly and with greater impact than any other source. Their effects are stronger than the direct influence of one's scholastic aptitude or previous academic achievement, and much stronger than any direct influence from one's social origins per se. Rather, the aspirational influences of others (along with aptitude and academic achievement) appear to mediate the larger portion of the effect of one's social origins on aspirations (Kerckhoff 1974; Alexander, Eckland & Griffin 1975; Sewell & Hauser 1975; Debord, Griffin & Clark 1977; Otto & Alwin 1977). Significant others' influences correlate more strongly with educational ambitions than with occupational ones, but most studies have used education-specific measures of interpersonal influence.

Impacts of significant others show a complex pattern when viewed by gender and race. For white females, the influences of parents and peers still appear as the most direct determinants of educational "ambitions." But for white female occupational aspirations, and even more so for black adolescents, the social psychological influences from others are weaker determinants of ambitions as compared to white males. This pattern is embedded within the known race and sex differences in socioeconomic and ability determinants of aspirations (see Hauser 1971; Carter 1972; Williams 1972; Alexander & Eckland 1974; Porter, 1974, 1976; Hout & Morgan 1975; Debord, Griffin & Clark 1977; Kerckhoff & Campbell 1977). The state of the evidence from other countries on the efficacy of interpersonal determinants of

aspirations is quite mixed. From several western industrialized societies comparable findings are reported (Pavalko & Bishop 1966; Kandel & Lesser 1972; Williams 1972; Schwarzweller & Lyson 1974). Where "sponsored mobility" seems to be more prevalent than "contest mobility" (Yuchtman & Samuel 1975), or in third-world nations (Hansen & Haller 1973; compare Spencer 1976), the U.S. findings for the effect of significant others on aspirations are equivocal.

Other research which examines the influence of significant others has included (a) assessing the reciprocal kinds of influence peers exert on one another (Duncan, Haller & Portes 1968; Hout & Morgan 1975), (b) attempting to chart the effects of cross-sex (Michaels & McCulloch 1975) and cross-race influences on performance expectations (Entwisle & Webster 1974), (c) and investigating others in the significant other matrix (e.g., guidance counselors [Rehberg & Hotchkiss 1972], girl friends [Otto 1977] and teachers [see Persell 1977 for a review of this literature]). While the student-teacher relationship is a complex one, recent evidence suggests that teachers' influence on aspirations is generally small when compared to that of parents and peers (Sewell & Hauser 1975; Alexander, Eckland & Griffin 1975). To the extent teachers mold achievement ambitions, they appear to do so without regard for a child's social background (see Williams 1976 for a review; compare Rist 1970 and Rosenthal & Jacobson 1968). Finally, student ambitions may actually exert a greater influence on teacher expectations than vice versa (Nolle 1973; Williams 1975).

While the significant other approach has been fruitful, several issues remain unresolved. To the extent that significant others are attitude-specific and communicate their influence in one way as opposed to another then these variations need to be reflected in the measurement of interpersonal influence. A full mapping of who (of one's others) is important for which achievement attitudes and in what fashion (i.e., normative or modelling influence) has yet to be reported. Second, given a set of significant others who communicate information to an individual about his or her future roles, how does the individual go about accepting, rejecting, and combining the informational inputs in the formation of achievement attitudes? While the investigation of these topics is much precedented in other areas of social psychology (see, for example, Woelfel 1975 or the seemingly unrelated studies of status expectation states theory for task-oriented groups by Berger, Fisek, Norman & Zelditch 1977; Webster, Roberts & Sobieszek 1972; and Webster & Sobieszek 1974), they have yet to receive systematic attention in the study of achievement ambitions.

School-related Determinants of Ambitions

The thesis that high schools, as social "contexts" for achievement, exert a unique effect on "ambitions," apart form individual-level variables, has been a popular one (see Hauser 1971 and Bain & Anderson 1974 for reviews). The proposed school "contexts" have included socioeconomic composition, neighborhood status, ability composition (or "frogpond" effects), and other variants of educational "climates" (Sewell & Armer 1966; McDill, Rigsby & Meyers 1969; Hauser 1969, 1971, McDill & Rigsby 1973; Sewell & Alwin 1974; Meyer 1970; Nelson 1972; Alexander & Eckland 1975; Hauser,

1976; Alwin & Otto 1977). Most of the recent studies have restricted their attention to high school students' educational aspirations, the positive contextual effects of a school's socioeconomic level, and the negative effects of the school's ability composition. So for example, in combining the two, Meyer (1970) suggests that the effect of ability composition on college plans suppresses the positive impact of school socioeconomic resources, leaving no overall impact of "context."

When examined in an appropriate analytical model (Hauser 1971, Alwin 1976), the arguments for strong contextual influences on "ambition" and achievement generally imply differences in the strengths of relationship between achievement orientations and individual-level variables, depending upon kind of school context. Hauser et al. (1976; also see Alexander & Eckland 1975) have conducted one of the more thorough searches for such interaction effects, using an analysis of covariance model. This included the first-order interactions of high school by sex, ability, socioeconomic background, high school rank, significant others influence, college plans, and occupational aspirations. Of the 31 tests for statistical interaction only one was nominally significant. Moreover, the suppressor effect of average high school rank (Meyer 1970, Nelson 1972) yielded a statistically insignificant contribution of 1-2 percent to the explained variation in educational and occupational aspirations.

Additive effects of ability contexts across schools on students' ambitions appear to be larger, but they still do not exceed the effect of corresponding individual-level variables. Neither do they

always operate in the hypothesized fashion (see Alwin & Otto 1977). It is fair to conclude that a sociologically significant effect of schools per se on achievement aspirations has yet to be demonstrated, apart from any effects of individual-level characteristics.[4]

Several other context-like theses should be noted. First, a number of arguments have been made about the relationship between racial composition in schools or neighborhoods (segregation, integration, and more recently, the effects of forced and voluntary busing) and aspirations (see Spady 1976:205-212 for a review; also see St. John 1966; Armor 1967; Crain & Weisman 1972; Rosenberg & Simmons 1972; Falk & Cosby 1975; Rosenberg 1975). This relationship is a complex one, and sufficient evidence from sound research designs is not yet available. Second, there is some evidence that aspirations are more modest among persons from small communities (Sewell & Orenstein 1965; Sewell et al. 1970) and among persons reared in the South (Coleman et al. 1966; Crain & Weisman 1972). But the net effects, inasmuch as they can be discerned from the literature, are small and mainly reflect a contrast in farm-nonfarm origins. Finally, several investigators have drawn on Turner's (1960) notion of "sponsored vs. contest" mobility to explain race differences (Porter 1974, 1976), institutional context differences (Yuchtman & Samuel 1975), and apparent societal differences in aspirations and their determinants (Van Zeyl 1974). While perhaps an insightful distinction for some purposes, no study could be located in which "contest vs. sponsored"

mobility received explicit analytical treatment vis-a-vis ambition (i.e., measured or incorporated into an estimation procedure), although the Yuchtman and Samuel (1975) study probably comes closest.

SEX ROLES AND AMBITION

The relevance of sex roles for achievement phenomena has been amply documented (Hoffman 1972; Hochschild 1973; Komarovsky 1973; Stein & Bailey 1973; O'Leary 1974; Lipman-Blumen & Tickamyer 1975; Meeker & Weitzel-O'Neill 1977). From the standpoint of determinants of "ambition" the issues center around childhood experiences and the gender-specific socialization of achievement orientations, the comparability of motivational dynamics for females and males, and ultimately, the compatabilities of sex-role norms with those norms appropriate to the sequential roles of student, spouse, parent, and worker over the course of the life cycle.

From infancy, children experience a sex-differentiated world. This is the case in the way boys and girls are physically handled (Moss 1967) and in the play objects and activities to which they are directed (Kagan & Moss 1962). The images and models they see in books and other media are sex-stereotyped (passive, dependent, or altogether absent in achievement activities for girls; active, exploring, and independent for boys; Weitzman, Eifler, Hokada & Ross 1972 and Chafetz 1974), as are the values and behaviors that their parents define as most desirable (for boys, that they be interested in how and why things happen, that they be honest and try hard

to succeed; for girls, that they be neat and clean, and "act as girls should"; Kohn 1969:52-56). While much of the evidence, again, is at a bivariate correlational level, several of the samples in the Fels Longitudinal Studies show variations in sex-role socialization in childhood to be associated with achievement behaviors in adolescence (Kagan & Moss 1962; Katkovsky, Crandall & Good 1967; Crandall & Battle 1970). Moderate levels of parental warmth and nurturance, along with moderate permissiveness (rather than restrictiveness) in the imposition of rules, were instrumental in facilitating high achievement orientations and behavior for females (Stein & Bailey 1973 provide a summary of this literature). On the other hand, "femininity" was associated with very high levels of parental nurturance and protectiveness during childhood, and "passivity" with parental restrictiveness. Thus, the typical or "stereotypical" interactional pattern between parents and girls which yielded the common "traits" of "passivity" and "femininity" were less salient for or in opposition to the relational practices which (statistically) led to "ambition" in females in adolescence. The seeds of possible role conflict and strain in later adolescence and early adulthood appear well sown in childhood. Hoffman draws together the various themes in the following set of hypotheses:

> Since the little girl has (a) less encouragement for independence, (b) more parental protectiveness, (c) less cognitive and social pressure for establishing an identity separate from the mother, and (d) less mother-child conflict which highlights this separation, she engages in less independent exploration of her environment. As a result she does not develop skills in coping with her environment nor confidence in her ability

to do so [1972:147].

While this theory has its evidential base more in the bits and pieces of many different studies rather than in any single, unifying one, one of the more consistent sex differences in achievement-related characteristics has been in women's self-confidence in achievement situations (i.e., as indexed by performance expectations, self-evaluations and attributions of ability, and evaluations of a just-completed performance [Maccoby & Jacklin 1974; Deaux 1976; Lenney 1977]). Hoffman goes on to hypothesize that this syndrome results in the "all pervasive affiliative need in women."

Not unlike the more classic "task-instrumental" vs. "social-expressive" distinction for interpersonal behavior in task groups, others writing before Hoffman have proposed a unique "affiliative" motivational dynamic for women. Crandall (1963) suggests that girls' achievement strivings are directed toward external social rewards (social approval) while boys hold orientations and perform on the basis of satisfaction derived in meeting internal standards for performance. Veroff (1969) hypothesizes that achievement motivation for females is directed to external social cues and rewards (i.e., his social comparison motivation; also see Smith 1968:304-311). In a detailed review of literature on the topic, Stein and Bailey (1973) take the different versions of the hypothesis to task, offering an explanation which appears equally consistent with the evidence. Within a role theoretic perspective, their argument disavows some special motivational (viz., affiliative) complex for females. Instead, they suggest that female achievement orientations are

directed toward activities and life domains which are normatively "appropriate." Like males, females execute their roles in relation to internal standards for excellence--but the content of the roles, the domains selected as "appropriate" for achievement, frequently involve social and interpersonal skills. Meeker and Weitzel-O'Neill (1977) have recently made a related argument for sex roles and behavior in task-oriented groups.

This interpretation provides continuity for a number of themes in the literature. It appears that females hold lower expectancies (subjective probabilities of success) across a number of "masculine" achievement arenas (Crandall 1969; Sewell 1971; Stein & Bailey 1973; Marini & Greenberger 1976a, 1976b). Moreover, differences in "self-confidence" between the sexes may be quite situational in their manifestations. When the achievement situation is one in which females excel or one which is stereotypically feminine (i.e., verbal abilities [Maccoby & Jacklin 1974], interpersonal perceptiveness [Bem 1974]), Lenney (1977) finds the fundamental self-confidence differences between males and females to be inconsequential. That is, stepping out of the traditional female domains carries with it role conflict or stress (Komarovsky 1946; Klemmack & Edwards 1973), lower expectancies for success, lower self-confidence and greater anxiety--if for no other reason than the differential opportunities to "practice" and role-learn that are afforded the sexes in pre-adult socialization (Maccoby 1966). Thus, rather than a separate motivational dynamic or universally lower self-confidence (Maccoby & Jacklin 1974) female "ambition" (indeed, the male/female difference) can just as well be

based upon self attributions in different social situations (Deaux 1976) or upon performance reactions to that which is normatively proscribed and prescribed for each gender.

In summary, one of the more prominent ways in which internalized sex-roles shape achievement "ambition" is through the set of subjective expectancies for success in achievement situations (see Berger et al. 1977 for a related discussion from the standpoint of diffuse status characteristics). Attribution research provides a set of hypotheses explaining how sex-specific expectancies are maintained through the causal inferences individuals make in accounting for their own performances and those of others. It is not difficult to see how achievement orientations, through expectancy-value formulations, are intricately related to attributionally-governed role expectancies. Given an initial expectation that males are usually more competent at a competitive achievement task than females (see Broverman, Vogel, Broverman, Clarkson & Rosenkrantz 1972 for evidence on the popularity of this belief), several studies have shown that there follows a sequence of internal "reasoning" (attribution) about the basis of one's own and others' successes and failures. Where outcomes are in line with initial expectations, stable internal attributes (such as high or low ability) will be selected as the "cause"; on the other hand, temporary "causes" internal to the individual ("effort," "motivation") and external ones ("luck") will be used to account for discrepancies between outcomes and initial expectations.

Thus, success at the achievement task by a male is attributed to high ability, while success by a female at the same task is more likely

to be attributed to greater effort, luck, or an "easier" task (Deaux & Emswiller 1974; Feldman-Summers & Kiesler 1974). So, too, for failure--for males, as due to a temporary cause or aberration such as bad luck or the extreme difficulty of the task (since the failure outcome violates initial expectancy); female failure is more likely seen as indicative of a stable cause (low ability), since the achievement outcome is in keeping with the initial sex-based expectancy. Feather and Simon (1975) have demonstrated both of these classes of reactions to success and failure using reactions to performances by hypothetical males and females in traditionally male and female occupations. Moreover, the initial evidence from this line of research suggests that these patterns of attributions are characteristic both of actors accounting for their own performances and of the inferences others make in observing interaction (see Deaux 1976:338-347 for a review).

When initial expectations for task performances by males and females do not differ, the attributional patterns in the way female and male actors account for their performance are no different (McMahan 1973). However, when the initial expectations for differential performance are disconfirmed (success by females) and are attributed to temporary factors, there is little basis for either actors or observers to seriously revise their assumptions. To the extent that female achievement orientations are sex-role based, one might conclude that they will only approximate the male pattern when the mitigating effects of conventional attributions about achievement are breeched or reformulated.

In still more general ways, sex-role socialization apparently channels the expression of achievement "ambition" (French & Lesser 1964; Houts & Entwisle 1968; Peplau 1976). For example, Peplau (1976) finds for a group of college-aged women that Horner's fear-of-success measure is not associated with sex-role orientation (viz., traditional vs. liberal), career aspirations, SAT scores, college grades, self-ratings of ability, or performance on a laboratory achievement task. On the other hand, sex-role "traditionalism" was associated with lower SAT scores, lower career aspirations, and lower self-evaluations of ability. As a whole, the culturally based sex-role explanations for variations in achievement "ambitions" appear more efficacious than intrapsychic ones (i.e., affiliation motivation or a fear-of-success motive) (Monahan et al. 1974) in that they accommodate the ways in which the prevailing opportunity structure and socialization patterns serve as indirect determinants of achievement "ambition" for the two sexes.

Sex-role orientation denotes not only the learning of unique roles but also the adaptability to multiple or different role arenas. Consistent with this idea, Bem (1974, 1975) and Spence and colleagues (Spence, Helmreich & Stapp 1975) suggest that "masculinity" and "feminity" are separate characteristics of sex roles rather than opposite ends of a single continuum. While subject to much further scrutiny, some of their initial evidence shows the two dimensions to be positively correlated, with males and females scoring high on both having higher levels of self-esteem and (by indirect evidence) greater adaptability to multiple roles. The linkage of role adaptibility to differential "ambition" and achievement is left implicit in this work.

Since mothers are primary agents for the socialization of children into "appropriate sex roles," their participation in the labor force and career orientations are thought to influence their daughters' achievement ambitions. Daughters of working mothers appear to hold higher career aspirations, more egalitarian sex-role attitudes and a higher evaluation of female competence (Banducci 1967; Tangri 1972; Angrist & Almquist 1975). Yet the exact mechanisms through which mother's employment affects daughter (or son) are not that well understood (i.e., through modelling or via different interaction, child-rearing, and supervision in the home relative to nonemployed mothers; Hoffman 1974 provides a critical survey of the literature on these points).

A recent study by Macke and Morgan (1977) makes one of the few attempts to conceptually distinguish the different ways in which maternal employment might come to bear on the "work orientations" (see below) of black and white high school girls. (Since much of the research in this area is restricted to white middle-class families or to females attending college, their study is an exception.) They distinguish the positive and negative modelling effects of mother's employment (opposite signed effects of a dummy variable for mother's employment status) from the likely normative influence of mothers through both her sex-role "traditionality" score and the style of interaction with the daughter. The authors attempt to separate adolescent work orientation from "ambition" (as those not work-oriented are not necessarily lower in ambition--possibly pursuing their ambitions vicariously through

marriage and husband's activities) although it is not clear how successful they were. The dependent variable, "work orientation," was how early a girl plans to work in the life of her prospective children. They hypothesized that much of the influence of mother on daughter's "work orientation" would be conditional on other characteristics of mother (e.g., the status of the mother's occupation, the amount of interaction). They found little support for an hypothesis of unconditional positive modelling. For black mothers in blue-collar occupations, the modelling was of a negative variety, with daughter wanting a more rewarding career--moreso if mother was blue-collar than white-collar. In general, much of the effect of mother's employment on daughter's work orientation was non-additive. For example, when mother worked but held "traditional" views about sex roles, daughters more typically espoused a more positive orientation toward work. Girls with non-employed mothers showed a lower work orientation only if mother was sex-role "traditional" and there was high mother-daughter interaction. The important point here is that working mothers as models to be emulated are not sufficient stimuli for their daughter's career orientations and "ambition." The process appears more complex--conditional on other characteristics of both mother and daughter.

Pertinent to role experiences across generations, a number of studies have examined mother's employment in relation to the sex-typicality of daughter's career orientation (Douvan & Adelson 1966; Tangri 1972; Klemmack & Edwards 1973; Cardascia & Morgan 1974; Angrist & Almquist 1975; Tully, Stephan & Chance 1976). In frequently cited studies,

Tangri (1969, 1972) found mother's employment status and the percent men in mother's occupation (termed, the extent of "role innovation") to be the best predictors of sex-role "innovation" in daughter's career choice (among 200 seniors at the University of Michigan). Tangri's data and arguments are not always consistent, but she presents a heuristic typology for the socialization of role innovation (1972: 192-196). In it, mother's employment status and level of education are proposed as the two critical components.

Analogous to the "mobility through marriage" hypothesis (see Chase 1975) are several arguments which suggest that adolescent women's ambitions are vicariously satisfied through the achievements of their future husband and children. So, Turner (1964b) suggests that men pursue their material (extrinsic) and eminence (intrinsic) ambitions more directly, while women pursue their material ambitions primarily through husband's attainments and their intrinsic ambitions through education and their own careers. The idea that women's achievement orientations are in part funneled through future husband's anticipated activities retains some currency (Psathas 1968; Lipman-Blumen 1973; Tangri 1974).

SOCIOECONOMIC AND RELATED CONSEQUENCES OF AMBITION

Do achievement ambitions, particularly those crystallized by adolescence, play a role in the differential scholastic and occupational achievements of adulthood? In this section, four kinds of role residing and performance are at issue: (a) school

performance (more akin to sociological interest--academic performance over a semester or several years rather than a single course grade or performance score on a single intellective task); (b) ultimate educational attainment as indexed by highest grade completed; (c) the "status" and type of occupation in the early career; and (d) the economic rewards associated with roles (earnings, wage rates).

This section is restricted to a review of studies which meet several methodological desiderata for bringing evidence to bear on the ambition-achievement linkage. Most important, a study must be longitudinal with the measurement of "ambition" taken prior to the performance or attainment. Without this temporal feature to underlying study designs, ambitions as causes or consequences of achievements cannot be sorted out, even at a very crude level. Even with panel data the inference is still a complicated one (Duncan 1969). Additionally, studies with reasonably sized samples, sound measures, and minimally adequate background and ability controls in a multivariate framework are given greater attention. Few studies meet the full set of requirements.

School Performance

Many studies which link "ambition" to academic performance rely upon synchronic data on high school rank, test scores, grade point average, and aspirations (for example, Rosen 1956; Elder 1962; Houts & Entwisle 1968; Guggenheim 1969; Felice 1973; Anderson & Evans 1976). Some researchers assume a causal ordering in which scholastic performance is one of a series of antecedents of aspirations (Gordon

1972 Sewell & Hauser 1975; Otto & Haller 1978). Others interpret the correlations to imply the opposite causal ordering, with performance measures as dependent upon "ambition" (Porter 1974, 1976; Anderson & Evans 1976). Such synchronic evidence does not "prove" that "ambition" causes level of academic performance or vice versa, particularly in view of the likely conflation of performance and "ambition" at any given time.

There are a number of studies from the achievement motivation tradition with requisite designs which permit causal inference, but the dependent outcomes have largely been molecular intellective tasks (anagrams, digit or symbol manipulation, grade in a course or on a single test). Generally, these studies show that high achievement tendencies do facilitate higher performance levels--more so when there is a perceived instrumental or contingent link between a particular unit outcome and a larger set of outcomes (e.g., Atkinson & Raynor 1974, particularly Section III on "Motivation and Performance" and also the studies reprinted there by Karabenick & Youssef; Raynor, Atkinson & Brown; Raynor; and, Raynor & Rubin). Yet these studies rarely are based on a noncollege population or employ controls for socioeconomic background. There are even fewer studies in the tradition which focus on more cumulative, academic achievements. Entwisle (1972) has reviewed many of these, noting how they can be interpreted in a number of ways. Since then, Atkinson et al. (1976) report several unpublished studies showing the predicted mean differences in

high school GPA for several small samples of California boys, when cross-classified by resultant achievement motivation and mental maturity test scores (taken when they were in the sixth or ninth grades). There were no other reported controls for social background. Entwisle (1972:389) has argued that the few positive relationships between motivation and academic performance may as well be explained by ability or verbal productivity (fluency). On the other hand, Atkinson and colleagues (1976) believe that the cumulative effects of small differences in motivation may eventually lead to a long-term growth in ability--much more apparent later in life than earlier. In pointing to a web of interactions, it is suggested (Atkinson & Raynor 1974:217) that the solution to unravelling the complex relationship lies in the interaction between the nature of the task, motives of the individual, and the incentive character of the work situation. Issues surrounding the functional form among these relationships aside, the agnostic reader of this literature will find the claim that some global tendency to achieve substantially fixes academic performance across the school years to be somewhat overstated; at worst, it is without compelling empirical support in heterogeneous populations.

What can be said about the net causal impact of more object- or goal-specific "ambitions" on scholastic performance (e.g., test scores, grade point average)? Educational plans or aspirations are the most common "ambition" measures taken to determine subsequent school performance. Evidence from three bodies of data which had the required timing of measures and approached the other methodological criteria indicates that the effect is quite small.

(a) In a sample of several thousand male and female high school students in Ontario, Williams (1972, 1976) has estimated several multivariate models which relate educational "ambitions" to grades and test scores for subsequent school years. Under controls for ability, socioeconomic background, and prior academic achievement, the net effect of educational ambitions on academic performance (between a semester and two years later) was found to be very small--standardized regression coefficients (β) less than .10 or statistically nonsignificant (1976); less than β=.15 in the other (1972). This was the case for both males and females.

(b) From a national sample of 1955 U.S. high school sophomores, (some 1130 females and 947 males) Alexander and Eckland (1974) report similar findings. Controlling for ability, socioeconomic background, and prior class standing, sophomore educational ambitions (college plans) had a very small (β=.03) net effect on senior class standing (quintile ranking from school records) for the total sample. The senior standing equation did contain a significant interaction by sex, but the net increment to variance explained stemming from the nonadditive component was less than 1 percent.

(c) Kerckhoff and Campbell (1977), for a group of 1969 ninth grade boys in Fort Wayne, replicate this pattern for whites (n=390) but not for blacks (n=133). Ninth-grade educational ambitions, again with the requisite background, ability, and prior performance controls, did not have a significant direct effect on senior high grade point average for whites; but for black males, scholastic

performance was modestly dependent upon prior ambitions (β=.204), although larger sampling errors among the smaller black sample suggest a cautious interpretation.

Thus, while educational ambitions and academic performance are modestly correlated (zero-order r=.3 to .5; for cross-sectional correlations see Elder 1962; Sewell & Hauser 1975; Alwin & Otto 1977), the net effect of the former on the latter appears quite minimal. Most of the association is due to common prior antecedents (socioeconomic background, ability, and prior performance levels).

It might be argued that this minimal effect is somehow specific to the "ambitions" of adolescence. Yet prior to high school, educational aspirations are not that well formed; and after college entry, much of the variability in future educational ambitions is attenuated owing to the small percentage of the total population which pursues advanced degrees (although college underclassmen may perform remarkably better as a net function of their prior post-graduate ambitions). But if the relationship were a very strong one, it should at least be manifest during the senior high school years when concrete decisions about post-secondary education are very real issues. Assuming achievement attitudes are formed and implemented toward specific goals, it could be argued that educational ambitions should be more heavily implicated with eventual educational attainment (viz., years completed) rather than with scholastic performances per se. Thus, "academic orientations" (i.e., those specifically organized around the day-to-day performance in the classroom) should be the focal antecedent. There is some

evidence that these orientations are correlated with performance (Coleman 1961; Elder 1962; Crandall, Katovsky & Crandall 1965), but the causal hypothesis awaits a precise longitudinal test.

Educational and Occupational Attainment

The educational and occupational consequences of achievement orientations depend quite closely on what one believes about the nature and working of "ambition" and the point in the life cycle under consideration. Theoretically, if achievement orientations are taken and measured as relatively goal-specific attitudes, reflecting prior achievement experiences as well as orientations to future endeavors, there is evidence that such orientations in adolescence bear consequences for early-career role activity. On the other hand, for other portions of the life cycle (or as one posits a more general, enduring disposition to achieve across goal areas), the evidence weakens or does not exist.

For the total amount of schooling an individual eventually obtains, educational aspirations during high school hold modest predictive power. Evidence from longitudinal surveys, using simple recursive specifications, shows that about 10 percent of the variation in educational attainment is attributable to the net impact of aspirations among white males (Alexander et al. 1975; Sewell & Hauser 1975; Wilson & Portes 1975; Featherman & Carter 1976; Otto & Haller 1978). In addition, educational aspirations mediate the effects of social background and self-variables at least again as much for whites; but perhaps less so for blacks. This relationship appears stronger as aspiration and attainment become temporally more proximal, as in the instance of studies of aspiration during the

senior year of high school in relation to length of post-secondary education (see Rehberg & Hotchkiss 1974 and Kerckhoff 1974; or compare outcomes reported by Alexander and colleagues [Alexander & Eckland 1974; Alexander et al. 1975] against studies using a senior-year measure [Sewell & Hauser 1975; Otto 1976a]). While the evidence is much more limited, the overall relationship does not appear to vary markedly for females (Carter 1972; Alexander & Eckland 1974; Rehberg & Hotchkiss 1974) and may be slightly smaller for black males in relation to whites (Ohlendorf 1975; Kerckhoff & Campbell 1977; but see Portes & Wilson 1976). Generally, the time intervals between aspiration and attainment in these studies have ranged from five to fifteen years.

Occupational aspirations show a related, but somewhat weaker pattern. Where the total effect of education aspiration on educational attainment was around .33, the corresponding figure for occupational aspirations during the late high school years ranges from .30 (Otto 1976a; Otto & Haller 1978) to .16 (Sewell et al. 1970; Sewell & Hauser 1975). Featherman and Carter (1976) find senior-year occupational aspirations have predictive value for net occupational achievement (indexed by "prestige" or "status" scores) in the middle career that they do not have for early career attainments. Similarly, other studies which use either sophomore aspirations (Alexander et al. 1975) or very early career occupational attainments (Porter 1974) report lower total and direct effects of occupational aspirations on attainmnets for white males.

There really has not been sufficient longitudinal evidence reported for blacks or females to warrant any firm conclusions about the predictive efficacy of occupational aspirations for mid-career occupational attainment. Likewise, little evidence is available on the occupational aspiration-attainment link for nonsocioeconomic facets of occupational roles.[5]

Thus the emerging picture shows educational and occupational aspirations, held late in the high school years, to hold modest predictive power for the corresponding achievements at mid-career. Additionally, we find a cross-arena effect of ambitions on attainments--that is, the occupational relevance of educational aspirations and the educational relevance of occupational ambitions. Generally, longitudinal research has shown educational aspirations exert an effect on occupation through their determination of educational attainment (standardized net regression coefficients ranging from .05 to .25) and occupational aspirations bear slightly smaller direct consequences for eventual educational attainment ($\beta \approx .03$ to .19) (Sewell et al. 1970; Porter 1974; Alexander et al. 1975; Sewell & Hauser 1975; Otto & Haller 1978). But consistent with the notion that specific achievement attitudes are formed and operate primarily along cognitively and structurally similar role arenas, the largest lines of consequence appear for isomorphic aspirations and attainments. To the extent that object-specific measures capture "ambition," then adolescent educational and occupational aspirations do have a modest level of consequence in eventual educational attainment and in the status of one's occupation at mid-career.

Following this theme, Duncan and colleagues (1972:155-165) have examined a number of specifications which take educational and occupational aspirations as reflections of an underlying motivational syndrome. The hypothetical motivational construct proved to be a modestly important source of early career achievements (see also Duncan & Featherman 1973). This was the case whether the motivational construct was specified as intervening between social background and achievements (reflecting "socialized motivation") or as operating in more of an "innate" fashion--independent of SES and ability--or in a combination of these ways. The data did not allow for a clear choice among the alternate specifications.

In contrast to the efficacy of (goal-specific) adolescent aspirations, inferences about more global adolescent or adult motives and orientations are much more complex, and the available evidence indicates they predict adult achievements much less accurately than object-specific ones. For 99 male and female members of the Oakland Growth Study, Skolnick (1966:467) found high school achievement imagery (TAT assessments in 1938) to be virtually uncorrelated with measures of social class twenty years later--1958. From the same longitudinal data, Elder (1968b, 1968c, 1974:173-177) found achievement imagery among adults to be more closely associated with adult occupational achievement than was the adolescent imagery--the ostensible interpretation being that the imagery reflects experiences to a much greater extent than the other way around. A very informative

assessment would be provided by incorporating panel measures of orientations and achievements into a model which allows for measurement falliability and both lagged and contemporaneous effects--much as Kohn and Schooler (1973, 1977) have done for the relationship between substantive complexity of work and intellectual flexibility. In a multivariate specification, Elder (1968b, 1974:175) finds "achievement drive," as rated by three judges observing student behavior in high school, to exert fairly modest effects on eventual educational attainment and occupational status in 1958, net of ability and family status in 1929. Yet it is difficult to interpret this measure as "pure" global motivation, since the judges attended to an array of behaviors and inferred characteristics including holding a "high aspiration level" (Elder 1968b:332).

Efforts to estimate the long-range career (occupational, economic) influences of some dispositional syndrome, based on various object-specific and projective indicators of "ambition" in adolescence and adulthood, have proven elusive (see Duncan et al. 1972: 116-155; Duncan & Featherman 1973). Reformulation of Crockett's (1962) analysis of the relationship between TAT achievement imagery among adults and their inter-generational occupational mobility led to considerable skepticism about the earlier conclusions (Duncan, et al. 1972:116-155). Based on structural equation models in which latent tendencies to achieve are manifest in several motivational and value indexes (e.g., "subjective achievement,"

"commitment to work," "importance of getting ahead"), little evidence is found to support the contention that "ambition" among adult males is either an important basis of differential socioeconomic achievements or a basic mechanism whereby the socioeconomic inequalities of one generation are transmitted to the next (viz., social mobility) (see Duncan 1969; Featherman 1971, 1972; Duncan et al. 1972: 130-155). At least among adults, such global "ambitions" were less consequential for the types of occupations and levels of earnings acquired over the life cycles of men than were schooling and even the lagged influences of socioeconomic background (e.g., father's occupation) itself. Recent research by Morgan and associates (Duncan & Morgan 1975) in their panel survey of a large national sample of households supports the interpretations above; namely, the economic fortunes of individuals and families over nearly a decade are primarily the result of life cycle contingencies (job losses, child-bearing, divorce, migration) rather than "ambition." This study provides one of the most crucial "tests" of the motivational argument, since its motivational and "self" instruments were selected on the basis of careful psychometric consultation; structural equation models estimated the direct and indirect effects of "ambition" under a variety of causal assumptions.

Thus, the net consequences of "ambition" among adults seem to be rather minimal, particularly when assessed as the effects of some global motivational construct. On the other hand, "ambition" among adolescents does carry over into early career attainments such as

schooling and first jobs. The different effects at early vs. later stages of the life cycle are important to note. They may reflect the greater predictive validity of object-specific measures of "ambition" such as those used in most studies of the short-run impacts in the transition from school to work. They may represent the causal specificity of "ambition" in the life cycle; namely, as adolescents pass through the critical high school years when decisions about post-secondary education, marriage, careers, and the like are in the foreground, differential ambition may play a more forceful role in the shaping of these plans and in their early execution. As the youth embarks upon adulthood and its major roles of worker, spouse, and parent, the exigencies of careers exceed the residual effects of "ambition." Put another way, the structure of institutional life in complex societies probably affords the individual the greatest choice during the secondary school and college years; this stage in the "cultural life cycle" is assumed to be a time for decision. Adulthood, as a configuration of roles and role sets, obligates the individual to actions under a variety of sometimes compatible and sometimes conflicting "motivational" forces and situational contexts. In that setting, it is not surprising that the net causal efficacy of "ambition" should be rather modest. Given the still crude technology for its assessment, "ambition" and its consequences are difficult to detect in extant empirical research.

To argue that motivations--particularly the dispositional arguments--have substantial consequences in educationl, occupational,

and economic achievements,one needs a theory having a number of features which overcome several problems. First, it needs to be developmental to explain many of the apparent variations from adolescence to adulthood in the stability and efficacy of motivation vis-a-vis role performance and residing. Second, its motivational consttucts and dimensions must be defined and measured apart from their proposed antecedents and consequences. When this is not possible--which is quite frequently--account must be given to the validity, reliability, and stability of indicators in relation to construct. Finally, the theory must specify the antecedent mechanisms through which the motivational orientations arise and subside along with the matrix of consequent achievement outcomes--all of this, ideally, with attention given to the life cycle specificity of relationships.

Other Role Consequences

While virtually all of this review has been directed toward adolescent and early adult orientations and roles, two other phenomena, ongoing through the remainder of the life-cycle, merit comment. Each represents areas deserving much greater investigation in the future as muchas they do well-developed bodies of theory and research at the present. First, the generic life satisfactions and aspirations, held and readjusted throughout the adult years (for example, see Clausen 1976 or Campbell 1972), are not that well understood. How are these "achievement orientations" (basically noneconomic) related to those of adolescence and the early career? In what measure do they both reflect prior role experiences and direct future role undertakings?

Second, adult roles (particularly one's job and occupation) act as socializing contexts, in part replacing the family and other aspects of social origins. The literature on job satisfaction has been the major source of studies in this area (see Kalleberg 1977 for a recent statement). But the effects ofwork roles on other aspects of psychological functioning or on orientations to future roles (rather than affective orientations to present or past roles) have been less extensively investigated. The work of Kohn and Schooler (1973, 1977; see also Bachman & O'Malley 1977 for a related analysis of self-esteem and Otto 1976b for one of adult social integration) provides one of the few exceptions. Their longitudinal research with a national sample (of fathers) shows an intricate, reciprocal relationship between occupational conditions ("substantive complexity" of work) and psychological functioning ("intellectual flexibility"). Over a ten-year period they find that both work conditions and intellectual flexibility have a fairly high level of stability; that complexity of work has a more immediate effect on contemporaneous intellectual flexibility; and that intellectual flexibility--with little effect on concurrent work conditions--has a substantial lagged effect on subsequent work conditions and hence on the shape of one's career (Kohn & Schooler 1977).

CONCLUSIONS

This review of a prodigious research literature on the origin and effects of ambitions to achieve in competitive roles was written to reflect several broad conclusions about a topic on which the beliefs of social scientists may be at variance with the inconclusive

results of their best research.

First, there are few if any conventions by which "ambition" is assessed. Except for the highly criticized use of the TAT to identify "tendencies to achieve," the research literature reveals no efforts to consistently apply the same instruments across studies or to interrelate the many methods and instruments. Little, if anything, is known about the psychometric properties of various scales, indexes, and inventories of achievement "ambitions." Consequently, it is virtually impossible to synthesize the array of findings into some coherent corpus of theoretic generalizations.

Second, the social psychological sources of differential "ambition" are at best suggested by an unsystematic empirical literature. Bivariate correlations abound, but in the few pieces of multivariate research in diverse population samples, there is scant evidence to indicate that social scientists have identified the main interactional and contextual wellsprings of ambition either within the family or the school. The most fruitful line of inquiry has addressed the social influence of "significant others," but even here the interpretations of how these others mold and foster "ambition" are not firmly established by recent research.

Third, in tightly controlled experimental situations, success and failure at competitive tasks influence levels of "ambition" and are consequences of "ambition." But in the natural world of multiple and often competing roles, the successes and failures of

persons in schools and across their occupational careers are more likely to result from contingencies in their life cycles such as marriages, divorces, births of children than from their differential ambition to achieve in these competitive settings. To the degree that "ambition" plays more than a very minor role in the accumulation of worldly success, it occurs during adolescence and youth--in the transition from school to work--prior to incumbency in the multiplex of roles which characterizes adulthood.

This "state of the area" review should throw caution into the path of those who might otherwise accept the following line of reasoning as well established:

> We shall argue in the following section that the experiences of parents on the job tend to be reflected in the social relations of family life. Thus, through family socialization, children tend to acquire orientations toward work, aspirations, and self-concepts, preparing them for similar economic positions themselves [Bowles & Gintis 1976:141].

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FOOTNOTES

1. Research during the period of the last ten years is reviewed and summarized by this chapter with attention restricted to western industrial societies, and primarily the United States. Therefore, the conclusions are limited by these cultural and historical contexts.

2. Unpublished manuscript. Fink, F.L., & Stoyanoff, N. J. 1977. Model estimates as a function of estimation technique: a reanalysis of Anderson and Evans' model of socialization and achievement. Department of Communication, Michigan State Univ., East Lansing, MI.

3. See Hauser (1971:124-127) for estimation of a model which adjusts students' reports of parental influence for the contamination introduced by their own aspirations; Kerckhoff and Huff (1974), Spenner (1974), and Curry, Picou, Hotchkiss, Stritchfield & Stahura (1976) report on other aspects of perceived-versus-actual measures of interpersonal influence using bodies of data which have both sets of measures.

4. In contrast to school contexts per se other within-school variables may prove to be more powerful determinants of "ambitions." Several recent studies have shown that curriculum placement (enrollment in or completion of a college preparatory program) has a modest net effect on educational and occupational "ambitions," although the explanation for this empirical generalization remains to be clearly determined (Alexander and McDill 1976; Heyns 1974; Hauser et al. 1976; Rosenbaum 1976; Alwin and Otto 1977).

5. There is a large volume of descriptive studies of occupational and vocational interests in the literatures of vocational and counselling psychology. For a number of reasons--conceptual, analytical and methodological problems--this corpus of research was excluded from consideration here (see Temme 1975 and Spenner, 1977).